

Serial No.: 10/675,082
Examiner: Laura A. Bouchelle
Group Art Unit: 3763

CLAIMS

1-15. (Canceled)

16. (Currently Amended) A method for delivering an extrudable material within a body of a mammal, the method comprising the steps of: (a) providing a delivery catheter, the delivery catheter comprising: (1) a first elongated member defining a first distal opening and a first lumen extending within the first elongated member, the first elongated member for delivering a first material through the first lumen and into a distal section of the first lumen near the first distal opening; and (2) a second elongated member comprising a distal valve and a second lumen extending within the second elongated member, the second elongated member for delivering a second material through the second lumen and the distal valve, at least a portion of the second elongated member being slidably disposed within at least a portion of the first lumen such that the distal valve is selectively slidable (i) to allow delivery of the second material through the second lumen and the distal valve and into the distal section, and (ii) to push at least some of the first and second materials from the distal section and out of the first distal opening; and (b) extruding a fibrous material out of the distal section and into the body of a mammal, wherein step (b) comprises i. delivering the first material comprising a crosslinking agent to the distal section through the first lumen; ii. delivering the second material comprising a crosslinkable polymer to the distal section through the second lumen, thereby forming a fibrous material in the distal section; and iii. pushing the fibrous material out of the distal section by sliding distally and longitudinally the distal valve into the distal section.

17. (Canceled)

18. (Original) The method of claim 16 wherein the distal valve comprises a one-way flow-control valve.

19. (Original) The method of claim 17 wherein the first material surrounds the second material when the second material enters the distal section.

Serial No.: 10/675,082
Examiner: Laura A. Bouchelle
Group Art Unit: 3763

20. (Currently Amended) The method of claim 18 wherein step (b) further comprises cutting the fibrous material by operating the valve.

21. (Canceled)

22. (Currently Amended) The method of claim 18 wherein step (b) further comprises terminating the delivery of either the first material or the second material thereby terminating formation of the fibrous material.

23. (Currently Amended) The method of claim ~~17~~ 16 wherein at least one of the first and second materials further comprises a bioadhesive agent.

24. (Currently Amended) The method of claim 23 wherein the bioadhesive agent is selected from a group consisting essentially of collagen, laminin, fibronectin, poly-D-lysine, poly-L-lysine, and decapeptides.

25. (Currently Amended) The method of claim ~~17~~ 16 wherein the crosslinking agent comprises an ionic crosslinker.

26. (Original) The method of claim 25 wherein the crosslinking agent comprises a polycationic crosslinker.

27. (Original) The method of claim 26 wherein the polycationic crosslinker comprises a calcium ion.

28. (Currently Amended) The method of claim ~~17~~ 16 wherein the crosslinkable polymer comprises an alginate.

29. (Original) The method of claim 16 further comprising the step of positioning the distal

Serial No.: 10/675,082
 Examiner: Laura A. Bouchelle
 Group Art Unit: 3763

section of the catheter within the body of a mammal.

30. (Currently Amended) The method of claim ~~17~~ 16 wherein the steps of delivering the first and second materials are sustained so as to form a fibrous material within the distal section and extrude the fibrous material out of the distal section and into the body of a mammal

31. (New) A method for delivering an extrudable material within a body of a mammal, the method comprising the steps of: (a) providing a delivery catheter, the delivery catheter comprising: (1) a first elongated member defining a first distal opening and a first lumen extending within the first elongated member, the first elongated member for delivering a first material through the first lumen and into a distal section of the first lumen near the first distal opening; and (2) a second elongated member comprising a distal valve and a second lumen extending within the second elongated member, the second elongated member for delivering a second material through the second lumen and the distal valve, at least a portion of the second elongated member being slidably disposed within at least a portion of the first lumen such that the distal valve is selectively slidable (i) to allow delivery of the second material through the second lumen and the distal valve and into the distal section, and (ii) to push at least some of the first and second materials from the distal section and out of the first distal opening; and (b) extruding a fibrous material out of the distal section and into the body of a mammal wherein step (b) comprises i. delivering the first material comprising a crosslinking agent to the distal section through the first lumen; and ii. delivering the second material comprising a crosslinkable polymer to the distal section through the second lumen, thereby forming a fibrous material in the distal section, wherein the crosslinking agent comprises an ionic crosslinker comprising a polycationic crosslinker.

32. (New) A method for delivering an extrudable material within a body of a mammal, the method comprising the steps of: (a) providing a delivery catheter, the delivery catheter comprising: (1) a first elongated member defining a first distal opening and a first lumen extending within the first elongated member, the first elongated member for delivering a first material through the first lumen and into a distal section of the first lumen near the first distal

Serial No.: 10/675,082
Examiner: Laura A. Bouchelle
Group Art Unit: 3763

opening; and (2) a second elongated member comprising a distal valve and a second lumen extending within the second elongated member, the second elongated member for delivering a second material through the second lumen and the distal valve, at least a portion of the second elongated member being slidably disposed within at least a portion of the first lumen such that the distal valve is selectively slidable (i) to allow delivery of the second material through the second lumen and the distal valve and into the distal section, and (ii) to push at least some of the first and second materials from the distal section and out of the first distal opening; and (b) extruding a fibrous material out of the distal section and into the body of a mammal wherein step (b) comprises i. delivering the first material comprising a crosslinking agent to the distal section through the first lumen; and ii. delivering the second material comprising a crosslinkable polymer to the distal section through the second lumen, thereby forming a fibrous material in the distal section, wherein the crosslinking agent comprises an ionic crosslinker comprising a polycationic crosslinker which comprises a calcium ion.